

WHAT IS CLAIMED IS:

1. A method for zooming a stereoscopic image comprising:
 determining a parallax value for a region of the image;
 selecting a zoom area having a boundary intersecting the region; and
 shifting the zoom area by the parallax value or a function of the parallax value.
2. A method for zooming a stereoscopic image comprising:
 determining a plurality of parallax values for corresponding regions of the image;
 selecting a zoom area having a boundary intersecting at least a portion of the regions;
 comparing the parallax values for the intersected regions to determine a shift parallax
 5 value; and
 shifting the zoom area by the shift parallax value or a function of the shift parallax
 value.
3. The method as in claim 2, wherein the shift parallax value is the minimum parallax
 value of the intersected regions.

4. A method for zooming a stereoscopic image comprising:
 - dividing the image into a plurality of regions;
 - defining a value for each region;
 - selecting a zoom area having a boundary intersecting at least one of the regions;
5. comparing the values for the intersected regions to determine a preferred value based on predetermined criteria; and
 - shifting the zoom area by the preferred value or a function of the preferred value.
5. The method as in claim 4, wherein the predetermined criteria comprises the minimum value of the intersected values.
6. The method as in claim 4, wherein shifting of the zoom area is by a function of the value, the function comprising division of the value by two.
7. The method as in claim 6, wherein the function further comprises addition of an offset, the offset selected from the group consisting of zero to place the stereoscopic window right at the closest object when zoomed, a negative value to push the closest object slightly behind the stereo window when zoomed, and a positive value to pull the closest object slightly out of the window when zoomed.
8. The method as in claim 4, wherein the value comprises the minimum parallax value for the corresponding region divided by two.
- 10 9. The method as in claim 8, wherein the value further comprises an offset, the offset selected from the group consisting of zero to place the stereoscopic window right at the closest object when zoomed, a negative value to push the closest object slightly behind the

stereo window when zoomed, and a positive value to pull the closest object slightly out of the
 5 window when zoomed.

10. The method as in claim 4, wherein at least one of the values comprises the minimum
 parallax value for the corresponding region.

11. An article of manufacture comprising:

a computer usable medium having computer readable program code means embodied
 therein for zooming a stereoscopic image, the computer readable program code means in the
 article of manufacture comprising:

5 computer readable program code means for dividing the image into a plurality of
 regions;

computer readable program code means for defining a value for each region;

computer readable program code means for selecting a zoom area having a boundary
 intersecting at least one of the regions;

10 computer readable program code means for comparing the values for the intersected
 regions to determine a preferred value based on predetermined criteria; and

computer readable program code means for shifting the zoom area by the preferred
 value or a function of the preferred value.

12. A computer program product for use with a graphics display device, the computer
 program product comprising:

a computer usable medium having computer readable program code means embodied
 therein for zooming a stereoscopic image, the computer readable program code means in the

5 article of manufacture comprising:

computer readable program code means for dividing the image into a plurality of regions;

computer readable program code means for defining a value for each region;

computer readable program code means for selecting a zoom area having a boundary

10 intersecting at least one of the regions;

computer readable program code means for comparing the values for the intersected regions to determine a preferred value based on predetermined criteria; and

computer readable program code means for shifting the zoom area by the preferred value or a function of the preferred value.

13. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for zooming a stereoscopic image, the method steps comprising:

dividing the image into a plurality of regions;

5 defining a value for each region;

selecting a zoom area having a boundary intersecting at least one of the regions;

comparing the values for the intersected regions to determine a preferred value based on predetermined criteria;

shifting the zoom area by the preferred value or a function of the preferred value.

10 14. A method for zooming a stereoscopic image comprising:

using an array of regions that divide the stereoscopic image into sections and

defining a value for each region.

15 15. The method of claim 14 wherein values associated with each region indicate a shift value that is used to adjust the relationship of the right and left image during a zooming operation.

16. The method of claim 14 wherein said sections and values are automatically determined from a 3D object model.

17. The method of claim 14 wherein said sections and values are determined from a user input of depth values in said regions and interpolating values in between said regions.

20 18. The method of claim 14 wherein said sections and values are determined using parallax adjustments for successive zooming operations dependent on a current zoom level. 19. The method of claim 14 further comprising using said sections and values with

multiple levels of granularity for higher definition of sections and values in select areas of said image.